

REMARKS

Applicant wishes to thank the Examiner for the attention accorded to the instant application, and respectfully requests reconsideration of the application as amended.

Formal Matters

Claims 1, 7, and 13 are the claims currently pending in the Application.

Rejection of Claims Under 35 U.S.C. §102

Claims 1 and 7 are rejected under 35 U.S.C. §102(e), as being anticipated by Conover, *et al.*, U.S. Patent No. 6,373,960 (hereinafter "Conover"). This rejection should be withdrawn based on the comments and remarks herein.

Among the problems recognized and solved by Applicant's claimed invention is the need to allow for an increased amount of information to be inserted into DCT coefficient data. Applicant's inventive solution eliminates variations in code length that occur when information is inserted, enabling insertion of a great deal of information into compressed digital image data. As recited in the claims, applicant's invention prevents overall or total code length variations by changing at least one DCT coefficient of the input DCT coefficients, and restoring or correcting the total code length by at least referring to a variable-length code table, so that the total code length of the resulting DCT coefficient is equal to the original total code length.

The Examiner alleges that the watermark embedded into a compressed video bitstream teaches changing the sign of a DCT coefficient to produce changed DCT coefficients in an image block, and the Examiner further asserts that Conover teaches that

the magnitude of a coefficient in an image block is modified so that the total code length remains the same. Applicant respectfully disagrees.

Conover teaches that the simplest modification is changing the sign of the coefficient of the DCT, and that changing the magnitude of the coefficient of the DCT is analogous to changing the sign. Conover also teaches a table that includes forty possible numerical values of a DCT coefficient having a run-length of zero (column 11, lines 32-48), and Conover discloses that, based on this table, a DCT coefficient having run length zero and numerical value ten can be arbitrarily replaced with a DCT coefficient having run length zero and numerical value eight without changing the length of the compressed video bitstream (column 12, lines 39-45).

However, Conover does not disclose or suggest correcting a level of a DCT coefficient selected from the changed DCT coefficients in the block, excluding the at least one changed DCT coefficient, to produce corrected DCT coefficients, as recited in claims 1 and 7 of the present application. Conover merely discloses prefixing sufficient zeros to provide the required number of bits. Applicant respectfully points out that prefixing zeros will not modify the value of the DCT coefficient and will not correct a level of a DCT coefficient. Hence, Conover does not disclose or suggest each and every feature of independent claims 1 and 7.

It has been held by the courts that “Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). As illustrated above, Conover does not disclose changing at least one DCT coefficient of the input DCT

coefficients to produce changed DCT coefficients or correcting a level of a DCT coefficient selected from the changed DCT coefficients in the block, excluding the at least one changed DCT coefficient, to produce corrected DCT coefficients. Accordingly, Conover does not disclose every feature of the invention as recited in claims 1 and 7. Consequently, these claims are not anticipated by the art of record in the application, and this rejection should be withdrawn.

Rejection of Claims Under 35 U.S.C. §103

Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over Conover. This rejection should be withdrawn based on the comments and remarks herein.

As discussed above, Conover does not disclose or suggest changing at least one DCT coefficient of the input DCT coefficients to produce changed DCT coefficients or correcting a level of a DCT coefficient selected from the changed DCT coefficients in the block, excluding the at least one changed DCT coefficient, to produce corrected DCT coefficients, so that Conover does not disclose or suggest every feature of the invention as recited in claim 13.

It has been held by the courts that to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See, *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As illustrated above, Conover does not disclose or suggest each and every feature of the present invention as recited in claim 13. Thus *prima facie* obviousness has not been established. Accordingly, claim 13 is distinguishable over the art of record in the application. Therefore, withdrawal of this rejection is kindly requested.

Nonstatutory Double Patenting Rejection

Claims 1, 7 and 13 are rejected on the ground of nonstatutory obviousness-type double patenting as unpatentable over claims 1 and 6 of U.S. Patent No. 6,775,416. Applicant files a terminal disclaimer in compliance with 37 CFR 1.321(c), and respectfully requests that this rejection be withdrawn.

Conclusion

For at least the reasons set forth in the foregoing discussion, Applicant believes that the Application is now allowable and respectfully requests that the Examiner reconsider the rejections and allow the Application. Should the Examiner have any questions regarding this Response, or regarding the Application generally, the Examiner is invited to telephone the undersigned attorney.

Respectfully submitted,



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